

# Table of Content

<b>Foreword (Carol Ryan)</b>	19
<b>Preface – Patrick Treacy</b>	22
<b>Case Report 1</b>	25
<i>Treating Dermal Filler Complications</i>	
<b>Case Report 2</b>	37
<i>Treating Dermal Filler Nodules in Lips</i>	
<b>Case Report 3</b>	45
<i>Treating Silicone Filler Complications</i>	
<b>Case Report 4</b>	52
<i>Treating HIV Lipoatrophy with Bio-Alcamid</i>	
Problems associated with Bio-Alcamid	59
<b>Advice: Tip 1</b>	63
<i>How to Treat Dermal Filler Inflammatory Nodules</i>	
<b>Case Report 5</b>	73
<i>Removing Bio-Alcamid from a HIV Lipoatrophy Patient</i>	
<b>Advice Tip 2</b>	82
<i>How to Prepare Hyaluronidase(Treacy protocol)</i>	
Dosages for vascular occlusion	83
<b>Case Report 6</b>	85
<i>Removal of Bio-Alcamid Filler from the Lip</i>	

<b>Case Report 7</b>	<b>90</b>
<i>Treating Infraorbital Swelling Post Dermal Fillers</i>	
<b>Case Report 8</b>	<b>94</b>
<i>Treating Lower Eye Bags with Phosphatidylcholine</i>	
What is phosphatidylcholine?	98
<b>Case Report 9</b>	<b>102</b>
<i>Treating Syringoma with Radiosurgery</i>	
<b>Case Report 10</b>	<b>106</b>
<i>Treating Autologous Facial Reconstruction</i>	
<b>Case Report 11</b>	<b>111</b>
<i>Treating Mid Face with Radiesse Dermal Filler</i>	
<b>Advice Tip 3</b>	<b>117</b>
<i>Dermal Filler and Blindness</i>	
<b>Advice Tip 4</b>	<b>124</b>
<i>Providing a Consent for Hyaluronic Acid</i>	
<b>Case Report 12</b>	<b>126</b>
<i>Treating Male Periorbital Area (CO<sub>2</sub> Laser)</i>	
<b>Case Report 13</b>	<b>136</b>
<i>Treating Female Periorbital Rhytids with CO<sub>2</sub> Laser</i>	
<b>Case Report 14</b>	<b>142</b>
<i>Treating an Upper Lid Chalazion</i>	
<b>Case Report 15</b>	<b>146</b>
<i>Treating a Tear Trough Deformity</i>	
<b>Case Report 16</b>	<b>155</b>
<i>Treating the Periorbital Area (Dublin Lift)</i>	
<b>Advice Tip 5</b>	<b>162</b>
<i>How to Perform the Dublin Lift</i>	

<b>Advice Tip 6</b>	<b>171</b>
<i>How to Deal with a Hyaluronic Acid</i>	
<i>Induced Vascular Occlusion (Treacy Protocol)</i>	
<b>Advice Tip 7</b>	<b>173</b>
<i>Using Hyperbaric Oxygen Therapy</i>	
<b>Case Report 17</b>	<b>175</b>
<i>Treating a Nine-Day-Old Vascular Occlusion</i>	
Patient Plan Week 1 (see daily)	180
Patient Plan Week 2, 3, 4, 5	181
Patient Plan Week 6, 7, 8, 9	181
Platelet-Rich Plasma (PRP)	185
Hyperbaric Oxygen Therapy (HBOT)	186
<b>Case Report 18</b>	<b>188</b>
<i>Treating a Facial Artery Vascular Occlusion</i>	
Special note on retinal artery occlusion	196
Supraorbital Notch	197
<b>Case Report 19</b>	<b>200</b>
<i>Treating a Nasal Dorsal Hump with Filler (FSR)</i>	
Common nasal deformities	202
<b>Case Report 20</b>	<b>207</b>
<i>Treating Lip Augmentation</i>	
(a) Loss of lip volume	209
(b) Ptosis of the oral commissures	210
(c) The appearance of melomental folds or marionette lines	210
(d) Vertical perioral rhytides	210
<b>Case Report 21</b>	<b>216</b>
<i>Treating Lip Infection Post Dermal Filler</i>	

<b>Case Report 22</b>	<b>219</b>
<i>Treating Acute Case of Lip Swelling</i>	
<b>Case Report 23</b>	<b>225</b>
<i>Treating Fordyce's Spots of Lips</i>	
<b>Case Report 24</b>	<b>228</b>
<i>Treating a Labial Mucocele</i>	
<b>Case Report 25</b>	<b>232</b>
<i>Treating Facial Agnesis Disfigurement</i>	
<b>Case Report 26</b>	<b>237</b>
<i>Treating Paediatric Lip Pyogenic Granuloma</i>	
<b>Case Report 27</b>	<b>243</b>
<i>Treating DSM 5 Excoriation Disorder by PLUS Technique</i>	
<b>Case Report 28</b>	<b>249</b>
<i>Treating Chemical Burns with the PLUS Technique</i>	
Stem cells	252
Autologous Platelet-Rich Plasma (PRP) injections	253
Red Light Phototherapy (LLLE)	254
<b>Case Report 29</b>	<b>257</b>
<i>Treating Glycolic Acid Burns with the PLUS Technique</i>	
<b>Case Report 30</b>	<b>262</b>
<i>Treating Hot Water Burns by PLUS Technique</i>	
LLLT	265
CALECIM® Professional Serum	265
Controversy over the use of red deer stem cells	267
<b>Case Report 31</b>	<b>268</b>
<i>Treating Nasal Melanocytic Nevus with Radiosurgery</i>	

<b>Case Report 32</b>	<b>273</b>
<i>Treating Cutaneous Malignant Melanoma</i>	
Adjuvant treatment of melanoma	283
Immunotherapy	284
<b>Case Report 33</b>	<b>288</b>
<i>Treating Squamous Cell Cancer</i>	
Treatment of invasive SCC	292
Radiotherapy	293
<b>Case Report 34</b>	<b>295</b>
<i>Treating Basal Cell Cancer</i>	
Nodular basal cell carcinoma	299
Infiltrative basal cell carcinoma	299
Micronodular basal cell carcinoma	300
Morpheaform (Sclerosing) basal cell carcinoma	300
Superficial basal cell carcinoma	300
Gorlin Syndrome or basal cell nevus syndrome	300
<b>Case Report 35</b>	<b>305</b>
<i>Treating Intra-dermal Nevi with Radiosurgery</i>	
<b>Case Report 36</b>	<b>309</b>
<i>Treating Fibrous Papule with Radiosurgery</i>	
Ellman radiosurgery	309
Uses of RF in dermatosurgery:	310
<b>Advice Tip 8</b>	<b>312</b>
<i>Dysport Vs Botox: What is the Difference?</i>	
<b>Case Report 37</b>	<b>314</b>
<i>Treating Facial Wrinkles with Botulinum Toxin</i>	

<b>Case Report 38</b>	<b>322</b>
<i>Treating Blepharospasm with Botulinum Toxin</i>	
<b>Case Report 39</b>	<b>329</b>
<i>Treating Trigeminal Neuralgia with Botulinum Toxin</i>	
Proposed mechanism of Botulinum Toxin (BTX)	332
<b>Case Report 40</b>	<b>338</b>
<i>Treating Lid Ptosis Caused by Botulinum Toxin</i>	
<b>Case Report 41</b>	<b>341</b>
<i>Treating Migraine with Botulinum Toxin</i>	
Botulinum Neurotoxin (BoNT) and migraine	343
Splenius Capitus Muscle Syndrome	348
<b>Case Report 42</b>	<b>351</b>
<i>Treating Head and Hand Essential Tremor with Botulinum Toxin</i>	
<b>Case Report 43</b>	<b>355</b>
<i>Treating Gastrocnemius Muscle with Botulinum Toxin</i>	
<b>Case Report 44</b>	<b>358</b>
<i>Treating Frey's Syndrome with Botulinum Toxin</i>	
<b>Case Report 45</b>	<b>363</b>
<i>Treating Depression with Botulinum Toxin (Omega Sign)</i>	
The Omega sign	364
Veraguth's folds	365
<b>Advice Tip 9</b>	<b>366</b>
<i>Using Botox for Treating Depression</i>	
<b>Case Report 46</b>	<b>373</b>
<i>Treating Palmar Hyperhidrosis with Botulinum Toxin</i>	
Plantar	374
Alternative treatments include:	375

<b>Case Report 47</b>	<b>378</b>
<i>Treating Axillary Hyperhidrosis with Botulinum Toxin</i>	
Whether to use the Minor iodine-starch test	380
Types of hyperhidrosis	381
<b>Case Report 48</b>	<b>383</b>
<i>Treating Axillary Hyperhidrosis with MiraDry®</i>	
<b>Case Report 49</b>	<b>389</b>
<i>Treating Axillary Hyperhidrosis with Onix®</i> <i>(Fractional Microneedling Radiofrequency)</i>	
Method	390
<b>Case Report 50</b>	<b>392</b>
<i>Treating Lichen Sclerosus of Penis</i>	
<b>Case Report 51</b>	<b>396</b>
<i>Treating Idiopathic Scrotal Calcinosis</i>	
<b>Case Report 52</b>	<b>401</b>
<i>Treating Pearly Papules of Penis</i>	
<b>Case Report 53</b>	<b>405</b>
<i>Treating Fordyce's Spots of Penis</i>	
<b>Advice Tip 10</b>	<b>409</b>
<i>How to Perform Radiosurgery Technique</i>	
<b>Case Report 54</b>	<b>414</b>
<i>Frontal Fibrosing Alopecia</i>	
<b>Case Report 55</b>	<b>418</b>
<i>Treating Seborrheic Keratoses</i>	
<b>Case Report 56</b>	<b>424</b>
<i>Treating Keloid Scars with RF and Steroids</i>	
Differences between keloid and hypertrophic scars	425

<b>Case Report 57</b>	<b>430</b>
<i>Treating Hypertrophic Scars with RF and Steroids</i>	
Median sternotomy wounds	431
<b>Case Report 58</b>	<b>434</b>
<i>Lifting a Neck with Silhouette® Threads</i>	
<b>Case Report 59</b>	<b>438</b>
<i>Lifting Lateral Brow Ptosis with Contour® Threads</i>	
<b>Case Report 60</b>	<b>443</b>
<i>Treating Scalp Psoriasis</i>	
Shampoos	444
Topical treatments	444
Vitamin D/corticosteroid combination products	445
Systemic treatments	445
Biologics	445
<b>Case Report 61</b>	<b>447</b>
<i>Treating Pyogenic Granuloma</i>	
<b>Case Report 62</b>	<b>454</b>
<i>Treating Giant Congenital Nevus with CO<sub>2</sub> Laser</i>	
<b>Case Report 63</b>	<b>461</b>
<i>Treating Acne Scarring with RF Microneedling</i>	
<b>Case Report 64</b>	<b>466</b>
<i>Treating Skin Laxity with Fractional MRF</i>	
Description of the Onix device	467
<b>Case Report 65</b>	<b>475</b>
<i>Treating Stretch Marks with Carboxytherapy</i>	
<b>Case Report 66</b>	<b>480</b>
<i>Treating Lichen Planus Actinicus</i>	



<b>Case Report 67</b>	<b>486</b>
<i>Treating Bullous Impetigo</i>	
<b>Case Report 68</b>	<b>491</b>
<i>Treating Hypopigmented Scar with Bimatoprost</i>	
<b>Advice Tip 11</b>	<b>495</b>
<i>The HELPIR Technique</i>	
Low-Level Laser (Light) Therapy (LLLT)	496
Platelet-Rich Plasma (PRP)	496
<b>Case Report 69</b>	<b>499</b>
<i>Treating a Compound Nevus</i>	
<b>Case Report 70</b>	<b>502</b>
<i>Treating a Trichilemmal Cyst</i>	
<b>Case Report 71</b>	<b>506</b>
<i>Treating a Facial Sebaceous Cyst</i>	
<b>Case Report 72</b>	<b>511</b>
<i>Treating Atrophic Acne Scars with Calcium Hydroxylapatite</i>	
<b>Case Report 73</b>	<b>518</b>
<i>Treating Facial Sebaceous Hyperplasia</i>	
<b>Case Report 74</b>	<b>524</b>
<i>Treating Abdominal Fat by VASER®</i>	
What happens during the VASER Liposelection® procedure?	527
<b>Case Report 75</b>	<b>530</b>
<i>Treating Plantar Warts by CO2 Laser</i>	
Immunotherapy	533
Lasers	533
Pulsed dye laser treatment	534
CO2 laser	534

Erbium YAG laser	534
<b>Case Report 76</b>	<b>538</b>
<i>Treating Paediatric Filiform Warts by Cryotherapy</i>	
Cryotherapy	539
Duct tape	540
Surgical removal by curettage or cautery	540
Chemical cautery	540
Salicylic acid	541
Cantharidin	541
Cryotherapy	541
Radiofrequency ablation	541
Carbon Dioxide (CO <sub>2</sub> ) laser	541
<b>Case Report 77</b>	<b>545</b>
<i>Treating Periungual Warts by CO<sub>2</sub> Laser</i>	
<b>Case Report 78</b>	<b>550</b>
<i>Historical of Treating Vascular Occlusion</i>	
<b>About the Author</b>	<b>552</b>
International Medical Awards, 2022	554
International Medical Awards, 2018	555
International Medical Awards, 2017	555
International Medical Awards, 2016	556

## Examination

Examination of the patient demonstrated multiple nodular swellings in her labial area. On palpation, she presented with firm longitudinal swellings measuring 3 cm × 2 cm along the lines of filler implantation in each patient (Fig 1-4). The nodules were prominent anteriorly and projected from inside the oral cavity.

## Treatment

She was willing to accept surgical correction and histopathological evaluation of their underlying problem. Surgical excisions were carried out by direct use of a size 11 scalpel blade, usually without the use of local anaesthesia, by allowing the nodules to point under digital manipulation.

The wound was thoroughly cleaned, and the vermilion tissues were approximated in some cases with 5-0 Vicryl Rapide sutures (Ethicon, Inc) to achieve haemostasis (Fig 5-5). The operation sites healed well, and most had healed within a few days. The first excision biopsies showed no evidence of foreign body giant cells or irregular crystalline structures and were considered not appropriate for the other patients.



1. Surgical extraction of the Bio in Blue

Bio-Alcamid (Polymekon, Italy) was an injectable soft tissue endoprosthesis that was recommended for correcting soft tissue defects and contour deformities. It consisted of 96% water and 4% synthetic polymeric polyalkylimide and once injected became enclosed within a thin collagen capsule. Injectable fillers have become an important component of minimally invasive facial rejuvenation modalities. Their ease of use, effectiveness, low morbidity, and fast results with minimal down-time are factors that have made them popular among patients (1).

The search for the ideal filling material has been ongoing for centuries. Various materials, including collagens, autologous fat, hyaluronic acids, poly-L-lactic acid, polyacrylamide, liquid injectable silicone, and calcium hydroxylapatite, are among the products currently used for this indication (2). Synthetic biodegradable hyaluronic acid fillers are widely used as relatively safe injectable methods of lip augmentation, but their duration was limited at the time this patient presented to only three or four months. Because of this, many physicians use alternative non-biodegradable materials like polyacrylamide gels and polyvinyl acid, to create a longer lasting 'semi-permanent' product.

However, these fillers, once more widely use, have an increased risk of product migration, granuloma formation and long-term adverse events. Treatment options include for these types of problems intralesional steroids, 5-fluorouracil (5-FU), anti-inflammatory and immunomodulatory drugs like minocycline, rifampicin or surgical correction. This report documents surgical correction of nine cases of problems related to the side-effects related to the semi-permanent fillers, Bio in Blue® and Bio-Alcamid® (both manufactured by Polymekon, Brindisi, Italy) over a three-year period.

### **Bio in Blue (Polymekon, Brindisi, Italy)**

Bio in Blue (Polymekon, Brindisi, Italy) is high purity polyvinyl alcohol (8%) and water (92%). Polyvinyl alcohol is a non-toxic substance used in medicine as a drug-carrier and a substitute for human plasma expander. Bio in Blue is a biodegradable substance with an immediate cosmetic effect can be maintained by treatment repeated at longer intervals than those necessary for other fillers.

Bio-Alcamid (Polymekon, Brindisi, Italy) is considered novel in the field of aesthetic and reconstructive surgery, because of its chemical and physical characteristics. It is considered intermediate between injectable filler and a common prosthesis and often referred to as an injectable endoprosthesis (3). Bio-



*Images of the patient during recovery of her forehead procedure.*

Case studies in the scientific literature range from seeing patients with complications within hours of an injection up to 24 years later (8). However, there is no food and drug administration (FDA)-approved product available for soft tissue augmentation. The major indication for FDA-approved products is retinal detachment with the removal of the material after re-attachment. In soft tissue augmentation, the removal of silicone is impossible without surgery. The use of liquid silicon is off label (9). Severe adverse effects have also been noted after the use for facial tissue augmentation (10).



[www.abodishep.com](http://www.abodishep.com)



*Nurse Lindsey McEnroe, Donna Corden UK (autologous semi-face transplant), Dr Patrick Treacy (Chairman RSM Committee), and Carol Bryan, USA (autologous semi-face transplant), at the Royal Society of Medicine, 2019*

The Royal Society of Medicine hosted the 11th annual RSM Aesthetics conference in 2019 with lectures from twelve of the world's top aesthetic experts, with the plenary lecture given by an Ig Nobel Prize winner and with the opening by Dr Patrick Treacy, the Chairman of the RSM Organising committee. The conference focussed on complications in aesthetic medicine and humanitarianism. Carol Bryan attended, giving a patient perspective in autologous partial face transplant. Also present were Donna Corden and nurse Lindsey McEnroe.

## References

1. Wilson, E. (DrPH), Rapues, J. (MPH), Jin, H. (MPH) and Raymond, H. F. (2013) 'The use and correlates of illicit silicone or "fillers" in a population-based sample of transwomen', *J Sex Med*, Author manuscript; available in PMC 2015 Jan 23.

2. Wallace, P. M. (2010) 'Finding self: a qualitative study of transgender, transitioning and adulterated silicone', *Health Education Journal*, **69**, 439-46.
3. Styperek, A., Bayers, S., Beer, M. and Beer, K. (2013) 'Nonmedical-grade injections of permanent fillers: medical and medicolegal considerations', *J Clin Aesthet Dermatol*, **6**, 4, 22-9.
4. The American Society for Aesthetic Plastic Surgery (ASAPS) [cited 28 January 2018, 2014]; 'Silicone injections for cosmetic use'.
5. Ellenbogen, R. and Rubin, L. (1975) 'Injectable fluid silicone therapy; Human morbidity and mortality', *JAMA*, **234**, 308-9.
6. Coulaud, J. M., et al. (1983) 'Adult respiratory distress syndrome and silicone injections', *Toxicol Eur Res.*, **5**, 171-4.
7. Hariri, L. P., et al' (2012) 'Progressive granulomatous pneumonitis in response to cosmetic subcutaneous silicone injections in a patient with HIV-1 infection. case report and review of the literature', *Arch Pathol Lab Med.*, **136**, 204-7.
8. Narins, R. S. and Beer, K. (2006) 'Liquid injectable silicone: a review of its history, immunology, technical considerations, complications and potential', *Plast Reconstr Surg.*, **118**, 3, 77S-84S.
9. Duffy, D. M. (1990) 'Silicone: a critical review', *Adv Dermatol*, **5**, 93-107; discussion 108-9.
10. Altmeyer, M. D., Anderson, L. I. and Wang, A. R. (2009) 'Silicone migration and granuloma formation', *J Cosmet Dermatol*, **8**, 2, 92-7.
11. Ficarra, G., Mosqueda-Taylor, A. and Carlos, R. (2002) 'Silicone granuloma of the facial tissues: a report of seven cases', *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.*, **94**, 167-73.



## Treatment

The patient was injected bilaterally into the buccal, malar, and temporal areas of his face with 23cc of the polyalkylimide gel (Bio-Alcamid®, Polymekon, Italy) in an attempt to replace subcutaneous fat that had atrophied as a result of severe facial lipodystrophy. Regional injected anaesthesia was used in conjunction with topical anaesthesia. The treated area was sculptured to obtain the best aesthetic appearance. At the end of the treatment, the patient was put on prophylactic Augmentin and Klacid for three days to prevent infection.

The patient was injected bilaterally into the buccal, malar, and temporal areas of his face with 23cc of the polyalkylimide gel (Bio-Alcamid®, Polymekon, Italy) in an attempt to replace subcutaneous fat that had atrophied as a result of severe facial lipodystrophy. Regional injected anaesthesia was used in conjunction with topical anaesthesia. The treated area was sculptured to obtain the best aesthetic appearance. At the end of the treatment, the patient was put on prophylactic Augmentin and Klacid for three days to prevent infection.

## Introduction

The human immunodeficiency virus (HIV)-lipodystrophy syndrome (HLS) was a major problem for many HIV patients undergoing long-term use of highly active antiretroviral therapy (HAART). The psychological effects of the condition (both abnormal fat loss and abnormal fat accumulation) can be quite distressing, as it created low self-esteem and encourages social stigma. Patients presenting with facial lipodystrophy are twice as likely to feel recognisable as HIV-positive by their physical appearance (1). HLS was characterised by hypertriglyceridemia, decreased high-density lipoprotein-cholesterol, lipoatrophy, and central adiposity (2).

Facial lipoatrophy was the most obvious and stigmatising manifestation of HIV-related lipoatrophy (3). The aetiology of the condition is not yet fully understood. While some researchers focus on a multifactorial phenomenon, (4), (5) others consider either primary HIV infection (CD4 cell counts, viral load) or the use and duration of HAART as the most likely causes of the pathology. At first, protease inhibitors were implicated, but many researchers, including the author believed that HLS was caused by nucleoside analogues, particularly d4T and to a lesser extent AZT.

There was no available pharmacological therapy to manage this complex condition and medications such as rosiglitazone, pioglitazone, metformin, and

growth hormone have proved to produce no significant benefit. Most currently used strategies of the period tended to compensate for facial fat loss. These included a range of dermal fillers including bovine collagen; but the effects declined after 3 months (6). More recently, poly-L-lactic acid (PLA) has found favour in HIV lipodystrophic patients as it has advantages over other more permanent dermal fillers in respect to its safety record and efficacy (7).

However, PLA was limited in that it was difficult to inject, it usually takes many months to see the eventual effect, it requires up to five sessions to administer and the resultant contouring effect lasts only last two years. In addition, PLA does not actually restore lost fat mass where it is injected, but rather it expands the thickness of the dermis by neocollagenesis through fibroblast stimulation (8).



*1. Regional injected anaesthesia was used in conjunction with topical anaesthesia*